

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for making a plate-like ~~fibrefiber~~-reinforced composite product to be used as building or packing material, the method comprising the steps of

~~placing fibres on a lower laminate,~~

~~applying a foaming hardening binding agent in liquid form on the fibres so that the fibres are surrounded by the binding agent,~~

~~transferring the fibres with binding agent between the lower laminate and an upper laminate between lower and upper pressing plates arranged to rotate endlessly on the upper, respectively the lower, side of the fibres with the binding agent so that the fibres with the binding agent are transferred by means of the rotation speed of the pressing plates, allowing the binding agent to foam up, expand and harden between the upper and lower pressing plates, and~~

~~removing the laminates from the hardened product, c h a r a c t e r i z e d by the steps of~~

~~preparing the fibres into a three dimensional cohesive fibre mat of fibres bound together, the thickness of which basically ranges between 0.5 and 0.8 mm and the width between 0.3 and 2 mm, and the length of at least 80% of the fibres is at least 100 mm before the binding agent is applied onto the fibre mat,~~

~~providing the fibre mat with a moisture content of 5% at the most before the binding agent is applied onto the fibre mat,~~

~~applying the binding agent onto the fibre mat so that a mixture of fibre mat and binding agent is obtained, the mixture comprising fibres close to the upper surface thereof, which is turned against the upper pressing plates, and close to the lower surface thereof, which is turned against the lower pressing plates,~~

~~endlessly rotating the lower and the upper laminate between which the mixture of fibre mat and binding agent is guided, and~~

~~placing the mixture under a pressure of at least 0.8 bar and 5 bar at the most and allowing, before the laminates are removed, the mixture to harden into a plate-like product having a thickness of 10 to 150 mm and comprising fibres close to the upper surface thereof and close to the lower surface thereof when transferring the mixture between the pressing plates~~

preparing a three-dimensional cohesive fiber mat of fibers bound together, the fibers having a thickness mainly ranging between 0.5 and 0.8 mm and a width between 0.3 and 2 mm, at least 80 % of the fibers having a length of at least 100 mm,

providing the fiber mat with a moisture content of at or below 5 %,

placing the fiber mat on a lower laminate,

applying a foaming hardening binding agent in liquid form on the fibers of the fiber mat so that a mixture of fiber mat and binding agent is obtained wherein the fibers are surrounded by the binding agent,

transferring and guiding the mixture between the lower laminate and an upper laminate between lower and upper pressing plates, said lower and upper laminate and said pressing plates being arranged to rotate endlessly at a rotation speed on an upper and, respectively a lower, side of the mixture thereby transferring the mixture at the rotation speed

of the pressing plates, the mixture comprising fibers close to an upper surface thereof and close to a lower surface thereof,

placing the mixture under a pressure between about 0.8 bar and about 5 bar and allowing the binding agent to foam up and expand and allowing the mixture to harden between the upper and the lower pressing plates into a hardened plate-like product having a thickness of 10 mm to 150 mm and comprising fibers close to the upper surface thereof and close to the lower surface thereof when transferring the mixture between the pressing plates, and removing the laminates from the hardened product.

2. (Currently Amended) A method as claimed in claim 1, ~~characterized in that wherein the thickness of the fibre~~fiber mat before applying the binding agent thereto ~~is has a thickness of~~ approximately 1.5 to 3 times ~~the thickness of the final~~hardened product.

3. (Currently Amended) A method as claimed in claim 1, ~~characterized in that wherein the fibre~~fiber mat is made of hygroscopic ~~fibre~~fibers.

4. (Currently Amended) A method as claimed in claim 1, ~~2 or 3,~~ ~~characterized in that wherein the foaming binding agent is applied onto a fibre~~fiber mat having a moisture content of less than about 3%~~at the most~~.

5. (Currently Amended) A method as claimed in claim 1, ~~characterized in that wherein the mixture of fibre~~fibers and binding agent is subjected to a pressure of ~~1 to less than about 2 bar at the most~~.

6. (Currently Amended) A method as claimed in claim 1, ~~characterized in that wherein a material with a good adhesiveness is used as binding agent.~~

7. (Currently Amended) A method as claimed in claim 4, ~~5 or 6,~~ ~~characterized in that wherein polyurethane is used as the~~binding agent.

8. (Currently Amended) A method as claimed in claim 6, ~~characterized in that wherein~~ a phenol-based material is used as the binding agent.

9. (Currently Amended) A method as claimed in claim 1 ~~or 7~~, ~~characterized in that wherein~~ the ~~fibres~~fibers comprise wood ~~fibres~~fibers.

10. (Currently Amended) A method as claimed in claim 7, ~~characterized in that wherein~~ the ~~fibrefiber~~ mat including the polyurethane is transferred between the pressing plates at a temperature ranging between 30 and 90 degrees Celsius.

11. (Currently Amended) A method as claimed in claim 11, ~~characterized in that wherein~~ the binding agent is applied onto the ~~fibrefiber~~ mat by ~~means of~~ spray nozzles.

12. (Currently Amended) An apparatus for making a plate-like ~~fibrefiber~~-reinforced composite product to be used as building or packing material, the apparatus comprising

an inlet end ~~(10)~~ for receiving ~~fibres~~fibers surrounded by binding agent, an outlet end ~~(11)~~ for providing the plate-like ~~fibrefiber~~-reinforced composite product manufactured in the apparatus,

an upper endlessly rotating belt ~~(1)~~ comprising a plurality of upper pressing plates ~~(3)~~, ~~which~~ which, controlled by at least two elongated control elements ~~(32)~~ extending in ~~the~~ an longitudinal direction of the ~~apparatus~~ apparatus, are arranged to move ~~on~~ in an upper endless track, and a lower endlessly rotating belt ~~(2)~~ comprising a plurality of lower pressing plates ~~(4)~~, ~~which~~, which, controlled by at least two elongated control elements ~~(32)~~ extending in the longitudinal direction of the ~~apparatus~~ apparatus, are arranged to move ~~on~~ in a lower endless track, whereby the upper ~~elongated control elements (32) extending in the longitudinal direction of the apparatus~~ are arranged to move on a lower endless track, whereby the upper

pressing plates within an area of the upper endless track are arranged ~~on~~in a first substantially flat plane and the lower pressing plates within an area of the lower endless track are arranged ~~on~~in a second substantially flat plane, which is parallel to the first flat plane, whereby the upper and lower pressing plates within the area are arranged to transfer the ~~fibres~~fibers surrounded by the binding agent between them,

feed means ~~(13 to 16, 18 to 21)~~ for feeding an upper laminate ~~(12)~~ and a lower laminate ~~(17)~~ in said area, the upper laminate ~~(12)~~ is arranged to be supported in said area against the upper pressing plates ~~(3)~~ and to move at the same speed as the upper pressing plates, and the lower laminate ~~(17)~~ is arranged to be supported in said area against the lower pressing plates ~~(4)~~ and to move at the same speed as the lower pressing plates,

collecting means ~~(13 to 16, 18 to 21)~~ for collecting the upper and lower laminate ~~(12, 17)~~ from the plate-like composite product manufactured in the apparatus,

application means ~~(24)~~ at the inlet end ~~(10)~~ for applying ~~fibres~~fibers including binding agent in liquid form onto the lower laminate ~~(17)~~, and

heating means ~~(30, 31)~~ for heating the mixture of ~~fibres~~fibers and binding agent,
~~characterized by wherein~~

~~_____ the length of said area being having a length of 5 m to 30 m and thea width thereof 1 m to 5 m,~~

the apparatus comprising pressing means ~~(9)~~ for creating a pressure of at least 0.8 bar towards the pressing plates ~~(3, 4)~~,

the upper pressing plates ~~(3)~~ of the apparatus being arranged at a distance of 10 mm to 150 mm from the lower pressing plates ~~(4)~~, and

said feeding means being adapted to rotate the upper laminate ~~(12)~~ and the lower laminate ~~(17)~~ in endless paths.

13. (Currently Amended) An apparatus as claimed in claim 12,
~~characterized in that~~ wherein the pressing plates (3, 4) comprise a flat surface turned
against the laminates (16, 17) and gripping parts (38) to co-operate with endless drive
elements (35) belonging to the feed means that are arranged to be controlled by the control
elements (32).

14. (Currently Amended) An apparatus as claimed in claim 12,
~~characterized in that~~ wherein the upper and lower laminate (17) is made of
polyethylene foil.

15. (Currently Amended) An apparatus as claimed in claim 12,
~~characterized in that~~ wherein the application means comprise at least a spray nozzle
(24) arranged to sweep back and forth in the transverse direction in relation to the
longitudinal direction of the apparatus.

16. (Currently Amended) An apparatus as claimed in claim 12,
~~characterized in that~~ wherein the heating means (30, 31) comprise heating means
arranged to heat the upper and lower pressing plates (3, 4) to a temperature ranging between
30 and 100 degrees Celsius.

17. (Currently Amended) A plate-like ~~fibrefiber~~-reinforced composite stable
product comprising ~~fibres~~fibers surrounded by a binding agent to be used as building or
packing material, the composite product comprising ~~fibres~~fibers close to the upper and lower
surface of the product, ~~characterized in that~~ wherein

the ~~fibres~~fibers are in a form resembling a three-dimensional cohesive mat,

the ~~thickness of the fibres~~ fibers having a thickness mainly ~~ranges ranging~~ between 0.5
mm and 0.8 mm and ~~the~~ a width between 0.3 mm and 2 mm, and ~~the length of~~ at least 80% of
the ~~fibres~~fibers is having a length of at least 100 mm,

the ~~weight ratio between fibres~~fibers and binding agent ~~ranges~~ having a weight ratio ranging between 0.8 and 2 and ~~that the thickness of the plate-like product~~ having a thickness of ~~is~~ 10 mm to 150 mm.

18. (Currently Amended) A plate-like ~~fibrefiber~~fiber-reinforced composite product as claimed in claim 17, ~~characterized in that~~ wherein the binding agent is polyurethane.

19. (Currently Amended) A plate-like ~~fibrefiber~~fiber-reinforced composite product as claimed in claim 18, ~~characterized in that~~ wherein the product is not covered.